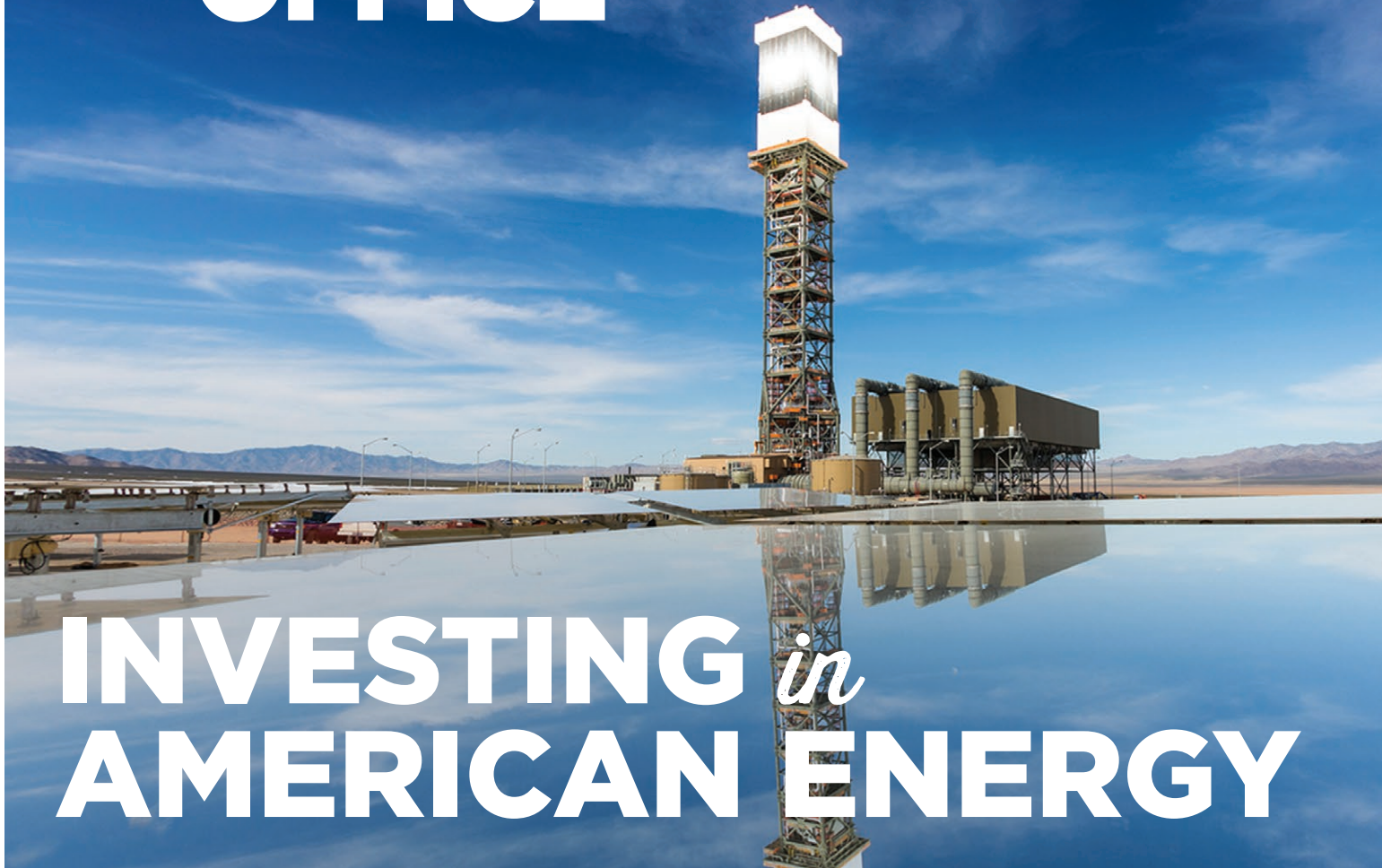




U.S. DEPARTMENT OF ENERGY

# LOAN PROGRAMS OFFICE



# INVESTING *in* AMERICAN ENERGY

**THE DEPARTMENT OF ENERGY'S LOAN PROGRAMS OFFICE (LPO) INVESTS IN THE POWER OF AMERICAN INNOVATION**

LPO investments accelerate the deployment of innovative clean energy projects and advanced vehicle manufacturing facilities across the United States.

Our team of financial, technical, environmental, and legal professionals is dedicated to advancing an all-of-the-above energy strategy that avoids, reduces, or sequesters greenhouse gases.

[energy.gov/lpo](https://energy.gov/lpo)

## A PROVEN PORTFOLIO OF CLEAN ENERGY INVESTMENTS

LPO currently supports a large, diverse portfolio of more than \$30 billion in loans, loan guarantees, and commitments, covering more than 30 projects across the United States.

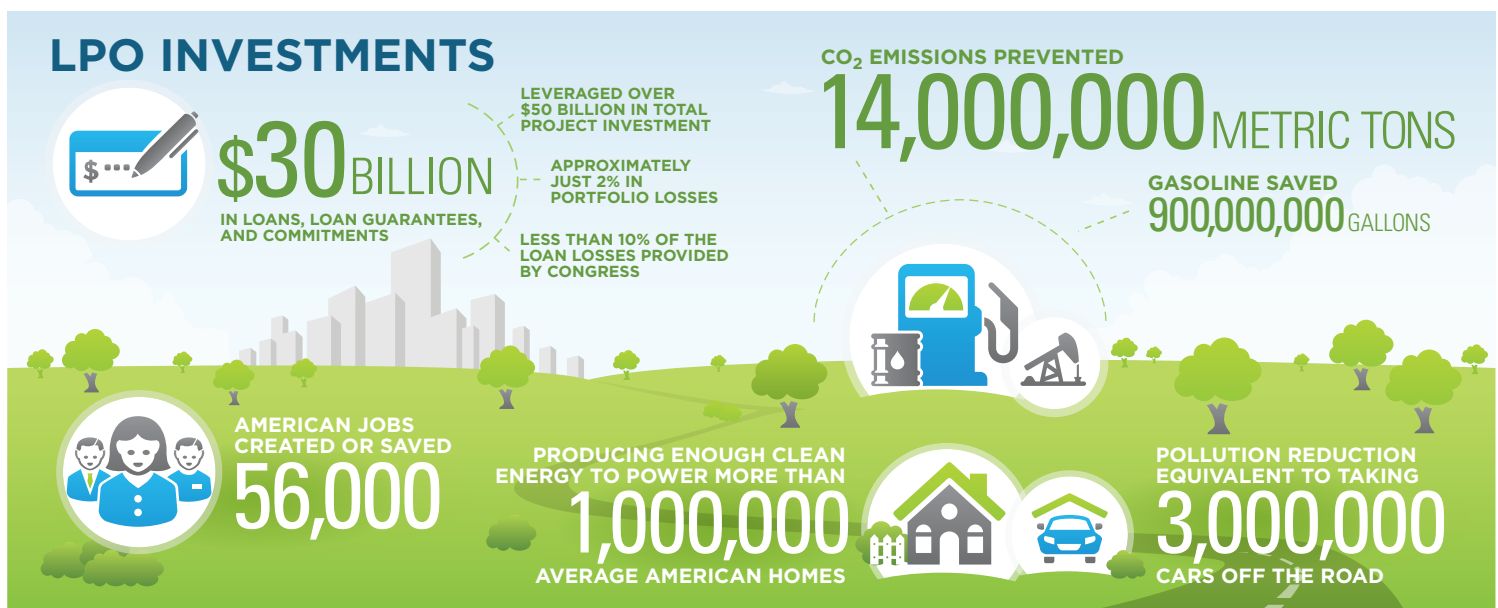
Together, these projects have generated more than \$50 billion in total project investment, supported tens of thousands of jobs, cut pollution, and enhanced American competitiveness in the global economy.

*“The use of loan guarantees allows for greater access to the capital markets resulting in lower-cost financing, thereby reducing the cost of electricity to consumers.”*

**MARVIN FERTEL,**  
PRESIDENT & CEO,

**NUCLEAR ENERGY INSTITUTE**

- POWER ENGINEERING, MARCH 2014



## LPO PORTFOLIO HAS SPURRED INNOVATION

- ⚡ First five utility-scale solar photovoltaic facilities larger than 100 MW in the United States
- ⚡ **Ivanpah** World's largest concentrating solar power plant
- ⚡ **Solana** World's largest operating solar thermal energy storage
- ⚡ **Vogtle** First new U.S. nuclear project to begin construction in 30 years
- ⚡ **Tesla** First all-electric auto manufacturer
- ⚡ **Nissan North America** Largest lithium-ion battery plant in the United States
- ⚡ **Shepherds Flat** One of the world's largest onshore wind farms
- ⚡ **Abengoa Bioenergy** One of the first cellulosic biofuel facilities in the United States

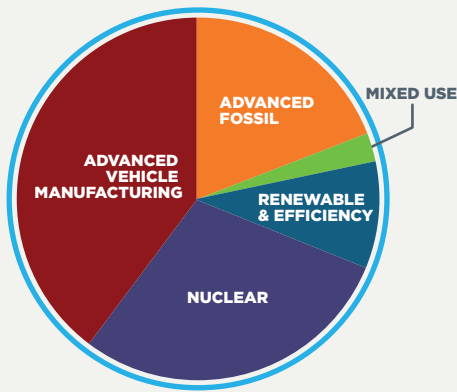
*“The federal loan was very helpful...what the government loan really did was accelerate our progress.”*

**ELON MUSK,**  
CEO & CO-FOUNDER,  
**TESLA MOTORS**

- 60 MINUTES, MARCH 30, 2014

**INVESTING *in* AMERICAN ENERGY**

# LOAN PROGRAMS & REMAINING AUTHORITY



**MORE THAN  
\$40  
BILLION  
IN REMAINING  
LOAN AUTHORITY**

LPO has more than \$40 billion in remaining loan and loan guarantee authority to finance innovative energy projects and advanced vehicle manufacturing.

It is currently accepting new applications under its two programs:

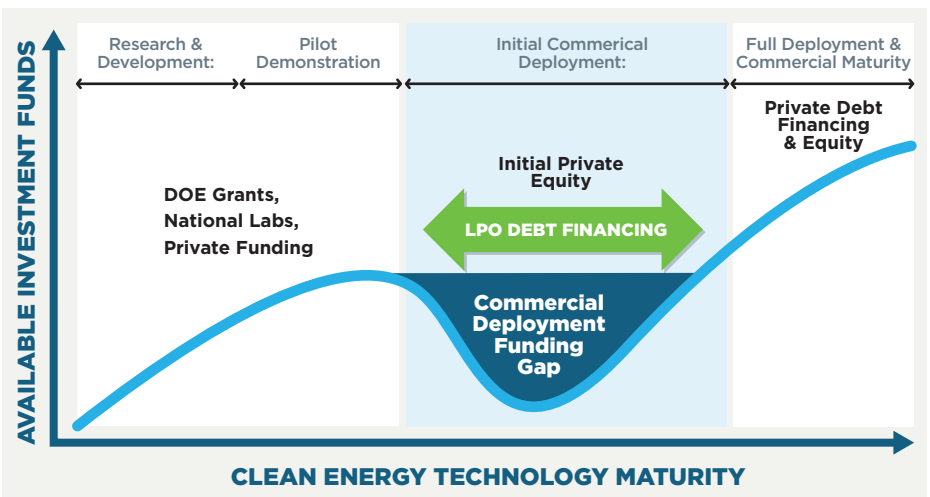
## Innovative Clean Energy Projects (Title XVII)

The Title XVII program **provides loan guarantees** to accelerate the deployment of innovative energy technology. The program applies to a wide range of energy technology, including **advanced fossil energy, nuclear energy, renewable energy, and energy efficiency**. Eligible projects must utilize a new or significantly improved technology, avoid, reduce, or sequester greenhouse gases, be located in the United States, and have a reasonable prospect of repayment.

## Advanced Technology Vehicle Manufacturing (ATVM)

The ATVM program **provides direct loans** to automotive or component manufacturers for **reequipping, expanding, or establishing manufacturing facilities in the United States** that produce fuel-efficient vehicles and components.

## BRIDGING THE GAP BETWEEN INNOVATION AND PRIVATE CAPITAL MARKETS



LPO financing accelerates the domestic deployment of innovative clean energy and advanced vehicle technologies for the benefit of all Americans.

*“We had been interested in the technology...but it was such an expensive project and it was the first of its kind. We didn't think the private sector would provide the debt financing. ...*

*The Department of Energy's loan guarantee program was a key part of the equation.”*

**DAVID CRANE**  
PRESIDENT & CEO,  
**NRG ENERGY**

- VEGAS MAGAZINE, SEPTEMBER 2013

# INVESTMENT, INNOVATION, & IMPACT: SUCCESS STORIES



## Launching Utility-Scale Solar in the United States

In 2009, the largest U.S. photovoltaic (PV) solar facility was only 14 megawatts. Demand existed for larger projects, but developers faced challenges in obtaining financing because solar projects had never been deployed at that scale in the United States.

In response, LPO provided \$4.5 billion in loan guarantees to support the first five U.S. PV projects larger than 100 megawatts. These projects are now generating electricity and proving that solar can be deployed at utility-scale.

As a result, large solar projects are now regularly financed by leading financial institutions—giving rise to a new utility-scale solar industry in the United States.



## Accelerating the Resurgence of U.S. Auto Manufacturing

U.S. auto manufacturing faced serious challenges in 2009. At the same time, American consumers were demanding cleaner and more fuel-efficient vehicles.

Since then, direct loans from the ATVM program have helped Ford Motor Company, Nissan North America, and Tesla Motors to produce more than 4 million advanced technology vehicles and approximately 35,000 direct jobs at manufacturing facilities across eight states.

LPO investments have helped restore and modernize automotive manufacturing in the United States, created demand along the component supply chain, and provided more fuel-efficient, American-made cars and trucks for consumers.



## Supporting America's First New Nuclear Power Plant in 30 Years

Nuclear power provides baseload, carbon-free electricity, yet the last new nuclear facility to be completed in the United States was in 1990.

Loan guarantees from LPO are now supporting construction of two new 1,100 megawatt nuclear reactors at the Alvin W. Vogtle Electric Generating Plant in Georgia that will generate enough carbon-free electricity to power more than 1.5 million homes.

This project is using the next generation of nuclear reactors that incorporate a number of new safety features, including passive safety systems that are able to respond in an emergency without any human intervention or electrical power.



## U.S. DEPARTMENT OF ENERGY LOAN PROGRAMS OFFICE

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For more information,  
and to apply online,  
please visit:

[energy.gov/lpo](http://energy.gov/lpo)